



Atty Dkt No. 5100-0005

**RECEIVED**  
OCT 16 2003  
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**SUPPLEMENTAL DECLARATION AND POWER OF ATTORNEY  
FOR UTILITY PATENT APPLICATION**

**AS A BELOW-NAMED INVENTOR, I HEREBY DECLARE THAT:**

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if more than one name is listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

**IMMUNOCHROMATOGRAPHIC METHODS FOR DETECTING AN ANALYTE IN A  
SAMPLE WHICH EMPLOY SEMICONDUCTOR NANOCRYSTALS AS DETECTABLE  
LABELS** the specification of which

\_\_\_ is attached hereto

X was filed on December 27, 2000, amended on April 28, 2003

and assigned Serial No. 09/750,223

**I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED  
SPECIFICATION, INCLUDING THE CLAIMS, AS AMENDED BY ANY AMENDMENT  
REFERRED TO ABOVE.**

I acknowledge and understand that I am an individual who has a duty to disclose information which is material to the patentability of the claims of this application in accordance with Title 37, Code of Federal Regulations, §§ 1.56(a) and (b) which state:

(a) A patent by its very nature is affected with a public interest. The public interest is best served, and the most effective patent examination occurs when, at the time an application is being examined, the Office is aware of and evaluates the teachings of all information material to patentability. Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section. The duty to disclose information exists with respect to each pending claim until the claim is canceled or withdrawn from consideration, or the application becomes abandoned. Information material to the patentability of a claim that is canceled or withdrawn from consideration need not be submitted if the information is not material to the patentability of any claim remaining under consideration in the application. There is no duty to submit information which is not material to the patentability of any existing claim. The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98. However, no patent will be granted on an application in connection with which fraud

on the Office was practiced or attempted or the duty of disclosure was violated through bad faith or intentional misconduct. The Office encourages applicants to carefully examine:

(1) prior art cited in search reports of a foreign patent office in a counterpart application, and

(2) the closest information over which individuals associated with the filing or prosecution of a patent application believe any pending claim patentably defines, to make sure that any material information contained therein is disclosed to the Office.

(b) Under this section, information is material to patentability when it is not cumulative to information already of record or being made of record in the application, and

(1) It establishes, by itself or in combination with other information, a prima facie case of unpatentability of a claim; or

(2) It refutes, or is inconsistent with, a position the applicant takes in:

- (i) Opposing an argument of unpatentability relied on by the Office, or
- (ii) Asserting an argument of patentability.

A prima facie case of unpatentability is established when the information compels a conclusion that a claim is unpatentable under the preponderance of evidence, burden-of-proof standard, giving each term in the claim its broadest reasonable construction consistent with the specification, and before any consideration is given to evidence which may be submitted in an attempt to establish a contrary conclusion of patentability.

I do not know and do not believe this invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to said application. This invention was not in public use or on sale in the United States of America more than one year prior to this application. This invention has not been patented or made the subject of an inventor's certificate issued before the date of this application in any country foreign to the United States of America on any application filed by me or my legal representatives or assigns more than six months prior to this application.

I hereby claim priority benefits under Title 35, United States Code § 119(e)(1) of any United States provisional application(s) for patent as indicated below and have also identified below any application for patent on this invention having a filing date before that of the application for patent on which priority is claimed:

<u>Application No.</u>	<u>Date of Filing</u> <u>(day/month/year)</u>	<u>Priority</u> <u>Claimed</u>
60/180,811	7 February 2000	Yes <u>X</u> No

I hereby appoint the following attorneys and agents to prosecute that application and to transact all business in the Patent and Trademark Office connected therewith and to file, to prosecute and to transact all business in connection with all patent applications directed to the invention:

Roberta L. Robins, Reg. No. 33,208  
Dahna S. Pasternak, Reg. No. 41,411  
Kenneth Barovsky, Reg. No. 36,442

Address all correspondence to: Roberta L. Robins at

Customer No. 20855  
ROBINS & PASTERNAK LLP  
1731 Embarcadero Road, Suite 230  
Palo Alto, CA 94303.

Address all telephone calls to: Roberta L. Robins at (650) 493-3400.

This appointment, including the right to delegate this appointment, shall also apply to the same extent to any proceedings established by the Patent Cooperation Treaty.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Signature: Marcel P. Bruchez

Date: 9-23-03

Name of Inventor: Marcel P. Bruchez

Citizenship: US

Residence: Belmont, CA

Post Office Address: 2425 Coronet Blvd., Belmont, CA 94002



Atty Dkt No. 5100-0005

Client No. 0005

PATENT

#16  
10/10/03

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

DANIELS et al.

Confirmation No.: 6599

Serial No.: 09/750,223

Group Art Unit: 1641

Filing Date: December 27, 2000

Examiner: COUNTS, GARY W.

Title: IMMUNOCHROMATOGRAPHIC METHODS FOR DETECTING AN  
ANALYTE IN A SAMPLE WHICH EMPLOY SEMICONDUCTOR  
NANOCRYSTALS AS DETECTABLE LABELS

## SUPPLEMENTAL DECLARATION OF INVENTORSHIP

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

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Sir:

We the undersigned, declare as follows:

1. We have reviewed U.S. Patent No. 6,274,323, entitled "METHOD OF DETECTING AN ANALYTE IN A SAMPLE USING SEMICONDUCTOR NANOCRYSTALS AS A DETECTABLE LABEL" on which Robert H. Daniels (listed as R. Hugh Daniels) and Marcel P. Bruchez are coinventors. We have also reviewed the claims pending in the present application.

2. We understand the Patent Office is relying on U.S. Patent No. 6,274,323 in the current Office Action as teaching the advantages of using conjugated nanocrystals as detection reagents in immunoassays. Robert H. Daniels and Marcel P. Bruchez invented the subject matter relied upon by the Patent Office. The invention claimed in the present application originated and was derived from Robert H. Daniels' and Marcel P. Bruchez's earlier invention and not from the other coinventors on U.S. Patent No. 6,274,323. This invention was extended by us, Robert H. Daniels, Andrew R. Watson and Marcel P. Bruchez, to arrive at the currently claimed invention.

Atty Dkt No. 5100-0005  
USSN: 09/750,223  
PATENT

3. We declare that all statements made herein of our own knowledge are true and all statements made on information and belief are believed to be true; and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: \_\_\_\_\_

\_\_\_\_\_  
Robert H. Daniels

Date: 9-26-03

A. R. Watson  
Andrew R. Watson

Date: 9-23-03

Marcel Bruchez  
Marcel P. Bruchez



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3. We declare that all statements made herein of our own knowledge are true and all statements made on information and belief are believed to be true; and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 9/23/03

  
Robert H. Daniels

Date: 9/26/03

  
Andrew R. Watson

Date: \_\_\_\_\_

\_\_\_\_\_  
Marcel P. Bruchez



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## DECLARATION OF KENNETH BAROVSKY

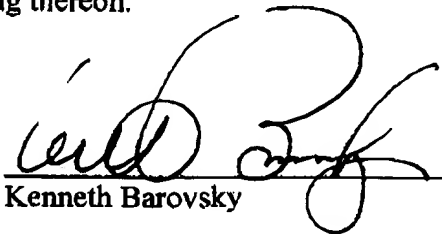
Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

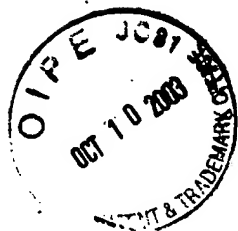
I, Kenneth Barovsky, hereby declare as follows:

1. I am the Vice President and Intellectual Property Counsel of the assignee of the above-identified application, Quantum Dot Corporation. The current application as well as U.S. Patent No. 6,274,323 were, at the time the inventions were made, owned by, or subject to an obligation of assignment to, Quantum Dot Corporation.

2. I declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: 02 OCT 2003  
Kenneth Barovsky





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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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**CONSENT OF ASSIGNEE FOR CORRECTION OF  
INVENTORSHIP UNDER 37 CFR §1.48(a)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

Quantum Dot Corporation, the owner of the entire right, title and interest in and to the above-identified application, by virtue of an assignment from Robert H. Daniels and Andrew R. Watson recorded March 21, 2001 at Reel 011415, Frame 0239, and an assignment from Marcel P. Bruchez a copy of which is appended hereto, hereby consents to the request to correct inventorship of the above-identified application to designate MARCEL P. BRUCHEZ as an additional inventor.

Date: 02 OCT 2003By: 

Name: Kenneth Barovsky

Title: VP and Intellectual Property Counsel

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**ASSIGNMENT****SOLE**

THIS ASSIGNMENT, by Marcel P. Bruchez (hereinafter referred to as the assignor), residing at Belmont, CA, witnesseth:

WHEREAS, the said assignor has invented certain new and useful improvements in IMMUNOCHROMATOGRAPHIC METHODS FOR DETECTING AN ANALYTE IN A SAMPLE WHICH EMPLOY SEMICONDUCTOR NANOCRYSTALS AS DETECTABLE LABELS set forth in an application for Letters Patent of the United States, bearing Serial No. 09/750,223 and filed on December 27, 2000; and

WHEREAS, Quantum Dot Corporation a corporation duly organized under and pursuant to the laws of California, and having its principal place of business at 26136 Research Road, Hayward, CA 94545 (hereinafter referred to as the assignee) is desirous of acquiring the entire right, title and interest in and to said inventions and said application for Letters Patent of the United States, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon:

NOW THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient considerations, the receipt of which is hereby acknowledged, the said assignor has sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto the assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions, application for Letters Patent, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application, or reissues or extensions of said Letters Patent or Patents, and all rights under the International Union for the Protection of Industrial Property, the same to be held and enjoyed by the said assignee, for its own use and behoof and the use and behoof of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted, as fully and entirely as the same would have been held and enjoyed by the assignor, had this sale and assignment not been made.

AND for the same consideration, the said assignor hereby covenants and agrees to and with the said assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said assignor has a right, title and interest in and to the said inventions and the application for Letters Patent above-mentioned, and that the same are unencumbered and that the said

assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, the said assignor hereby covenants and agrees to and with the said assignee, its successors, legal representatives and assigns, that the said assignor will, whenever counsel of the said assignee, or the counsel of its successors, legal representatives and assigns, shall advise that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with Letters Patent for said inventions in any country, including interference proceedings, is lawful and desirable, or that any division, continuation or continuation-in-part of any application for Letters Patent or any reissue or extension of any Letters Patent, to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of Letters Patent for said inventions, without charge to said assignee, its successors, legal representatives and assigns, but at the cost and expense of the said assignee, its successors, legal representatives and assigns.

AND the said assignor hereby requests the Commissioner of Patents to issue said Letters Patent of the United States to the said assignee as the assignee of said inventions and the Letters Patent to be issued thereon for the sole use and behoof of the said assignee, its successors, legal representatives and assigns.

Date 9.23.03

Name of Inventor Marcel P. Bruchez  
Marcel P. Bruchez



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**DECLARATION IN SUPPORT OF REQUEST TO  
CORRECT INVENTORSHIP UNDER 37 CFR §1.48(a)**

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

1. I, Marcel P. Bruchez, hereby verify that the error in omitting me as a named inventor on the above-identified application occurred without deceptive intention on my part.

2. I declare that all statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true; and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date:

9-23-03  
Marcel P. Bruchez